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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,366	03/15/2001	Peter Gerets	GERE3001/JEK	6161

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EXAMINER

REKSTAD, ERICK J

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/786,366

Applicant(s)

GERETS, PETER

Examiner

Erick Rekstad

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☒ Claim(s) 1 and 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper.No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: The specification does not included the necessary headings for the sections.

Appropriate correction is required.

35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: Page 6 Lines 1-5 and Page 7 Lines 22-32.

Claim Objections

Claim 1 objected to because of the following informalities: Claim states "(2:2 pull-down of 3:2 pull-down)" the "of" should be replaced with a "or". Appropriate correction is required.

Claim 3 objected to because of the following informalities: Claim states "performed a three-point median operation", as best understood the claim should state "performed by a three-point median operation". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claim states the movement detection can be performed by a three-point median operation, after which the result of the median filter is put through the steps of the described movement detection from the specification. The claim requires the movement detection to be performed then performed again after the median filter. As shown in Fig.1 of the application the movement detection (11) is only performed after the median filter (1).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claim 8 recites the limitation "detection of movement again being set to a high level" in Claim 7. There is insufficient antecedent basis for this limitation in the claim.

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Claims 1 and 7 do not describe a means for changing the level of sensitivity to movement. Further, claims 1 and 7 do not describe a "film the synchronization mode".

Claims 11-13 recite the limitation "video signals". There is insufficient antecedent basis for this limitation in the claim. Claim 1 does not describe multiple video signals. Further the specification does not describe the apparatus receiving multiple video signals (Note: Fig. 1 and Page 4 Lines 25-32).

Claim 21 recites the limitation "means for performing doubling and/or the means for performing quadrupling". There is insufficient antecedent basis for this limitation in the claim. Claim 15 does not contain the means for doubling or quadrupling.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 7, 11, 14, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4,982,280 to Lyon et al in view of US Patent 4,967,271 to Campbell et al.

[claim 1]

As best understood by the examiner, Lyon teaches the method for video processing, wherein possible movement between successive even and odd fields of the

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images is detected and the mode is determined (Col 5 and 6, Fig. 3). Lyon further teaches the sequence of movement or standstill between successive fields is stored in a memory (Fig. 3, 92) (Col 6 Lines 44-66). Lyon teaches the sequence being compared with patterns inherent to the mode and if the film mode is detected the even and odd fields from the same image are merged (Col 6 Lines 51-66, Col 7 Lines 1-25, Fig. 3 and 6). Lyon teaches the synchronization (Fig. 6, 110) of the film mode (Col 7 Lines 51-57, Fig. 6). It is well known in the art to hold a progressive frame until a new progressive frame is produced in a de-interlacing system (Official Notice). Lyon teaches the signaling to a scan line doubler used for video mode (Col 8 Lines 34-47). Lyon does not teach the use of a median filter when not in film mode. Campbell teaches the use of a median filter in a scan line doubler in order to eliminate the double imaging artifact in inter-field interpolation process (Col 3 Lines 27-32). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Lyon with the median filter of Campbell in order to eliminate double imaging artifacts.

[claim 2]

As best understood by the examiner, Lyon teaches ones in the film mode the sequence is tested every fifth state for a "0" verses the test in video mode where in a test states in the order of "01111" is tested (Col 7 Lines 1-5 and 43-50). It would have been obvious to one of ordinary skill in the art at the time of the invention that the sequence test in film mode uses less memory then the sequence test in video mode.

[claim 7]

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As best understood by the examiner, Lyon teaches the synchronization of the film mode and further teaches the output of the current location within the three-to-two pull down film in order to generate a predetermined multiplexer control pattern (Col 7 Lines 51-65). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the output of the current location to synchronize the multiplexer with the pattern of the pull down film.

[claim 11]

As best understood by the examiner, Lyon teaches the doubling of a video signal (Col 5 Lines 39-47).

[claims 14, 19 and 20]

As best understood by the examiner, Lyon teaches the apparatus characterized in that it includes a movement detector (Fig. 3, 98), a film mode/video mode detector (Fig. 3, 89) a synchronizer (Fig. 3, 89 and 68 Col 7 Lines 50-64) and a film processor proper (Col 6 Lines 23-31). Lyon further teaches the apparatus doubling the video signal as required by claims 19 and 20.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 4,876,596 to Faroudja.

US Patent 5,563,651 to Christopher et al.

US Patent 5,543,858 to Wishermann.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick Rekstad whose telephone number is 703-305-5543. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 703-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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